

Abstract

A flame retardant polymer composition consists of

- a) 20 - 60 percent by weight of a thermoplastic and/or cross-linked or cross-linkable elastomer and
- b) as a flame retardant agent 40 - 80 percent by weight either of an aluminium hydroxide with the material values

- specific surface according to BET 3 - 5 mg^2/g
- mean grain size d_{50} 1.0 - 1.5 μm
- residual moisture 0.1 - 0.4 %
- oil absorption 19 - 23%
- water absorption 0.4 - 0.6 ml/g

or of an aluminium hydroxide with the material values

- specific surface according to BET 5 - 8 m²/g
- mean grain size d₅₀ 0.8 - 1.3 μm
- residual moisture 0.1 - 0.6 %
- oil absorption 21 - 25 %
- water absorption 0.6 - 0.8 ml/g.

A process of producing the flame retardant agent is characterised in that a filter-moist aluminium hydroxide obtained by precipitation and filtration with a mean grain size of 0.8 to 1.5 μm is subjected to mill drying in a turbulent hot air stream in

5. such a way that, while the grain distribution is largely retained, the BET surface is increased by at least 20 %.